UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23838

7590

04/03/2009

KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005

EXAMINER					
NGUYEN, HOANG M					
ART UNIT	PAPER NUMBER				

3748

DATE MAILED: 04/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,333	07/25/2007	Masahiro Ogawa	960/216	6520

TITLE OF INVENTION: BRAYTON CYCLE DEVICE AND EXHAUST HEAT ENERGY RECOVERY DEVICE FOR INTERNAL COMBUSTION ENGINE

APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 07/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	ted below or directed oth	ng the Patent, advance on the nerwise in Block 1, by (rders and notification a) specifying a new c	of n orres	naintenance fees w pondence address;	and/or	mailed to the current (b) indicating a sepa	corre rate '	spondence address as "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
1500 K STREE' SUITE 700	KENYON LLP T N.W.	/2009		State	eby certify that the es Postal Service vessed to the Mail	is Fee(s th suf	of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	g depo st clas	osited with the United is mail in an envelope e. or being facsimile
WASHINGTON	N, DC 20005								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CO	NFIRMATION NO.
10/589,333 TITLE OF INVENTIO ENGINE	07/25/2007 N: BRAYTON CYCLE	DEVICE AND EXHAU	Masahiro Ogawa UST HEAT ENERGY		COVERY DEVIC	E FOR	960/216 R INTERNAL COMP	BUST	6520 10N
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	Т	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810		07/06/2009
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	3					
NGUYEN,	HOANG M	3748	060-618000						
"Fee Address" inc PTO/SB/47; Rev 03-1 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un	AND RESIDENCE DATA tless an assignee is ident th in 37 CFR 3.11. Com	" 1ndication form	data will appear on t	rnativ single or a t attor ll be or typ he pa g an a	vely, e firm (having as a gent) and the nam meys or agents. If printed. e) atent. If an assign assignment.	membes of upno nam	er a 2	ocum	ent has been filed for
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):		Individual 🖵 Co	orporati	on or other private gro	oup en	ntity 🗖 Government
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).						
	atus (from status indicated ns SMALL ENTITY statu		☐ b. Applicant is no	o lons	per claiming SMAl	L ENT	FITY status. See 37 C	FR 1.1	27(g)(2).
		uired) will not be accepte tes Patent and Trademark							
		nes rutem und Trudemari							
Typed or printed name Registration No									
an application Confider	ntiality is governed by 35 and application form to the tions for reducing this but Virginia 22313-1450. DC	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	1.14 This collection i	ie eet	imated to take 12 i	minutes	to complete includir	o oatl	hering preparing and

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,333	07/25/2007	Masahiro Ogawa	960/216	6520
23838 75	90 04/03/2009		EXAM	INER
KENYON & KENYON LLP		NGUYEN, HOANG M		
1500 K STREET N	I.W.		ART UNIT	PAPER NUMBER
SUITE 700 WASHINGTON, DC 20005		3748 DATE MAILED: 04/03/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/589,333	OGAWA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Hoang M. Nguyen	3748	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS	
1. This communication is responsive to <u>3/2/09</u> .			
2. The allowed claim(s) is/are <u>1,4-7,10,15,19,21,24 and 28</u> .			
 Acknowledgment is made of a claim for foreign priority ur All b) ☐ Some* c) ☐ None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Certified copies of the certified copies of the priority documents have The priority documents have Copies of the certified copies of the priority documents have The priority documents have The priority documents have Mall III is a copies of the priority documents have Copies of the certified copies of the priority documents have Certified copies of the priority documents have Mall III is a copies Certified copies of the priority documents have Mall III is a copies Mall III is a copies	been received. been received in Application No cuments have been received in this r of this communication to file a reply of	national stage application from the	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			
 CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1, each sheet. Replacement sheet(s) should be labeled as such in the 	on's Patent Drawing Review (PTO-9 s Amendment / Comment or in the O	office action of	
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5.	atent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	(PTO-413),	
3. Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7.	e nent/Comment	
Paper No./Mail Date4. \(\subseteq \subseteq \subseteq \text{Comment Regarding Requirement for Deposit of Biological Material } \(2/26/09 \)	8. ⊠ Examiner's Stateme 9. □ Other	nt of Reasons for Allowance	

Art Unit: 3748

STATEMENT OF REASONS FOR ALLOWANCE

After carefully considering the applied references, it's concluded that it would not have been obvious to combine the references to come up with the claimed invention without hindsight reconstruction.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/ Primary Examiner, Art Unit 3748

> HOANG NGUYEN PRIMARY EXAMINER ART UNIT 3748

Hoang Minh Nguyen 4/4/2009